

27. (New) The shuttle vector of claims 7, wherein the insect promoter comprises an IE2B element having at least 95% sequence identity to ACAGGACGC (SEQ ID NO: 10), and wherein the insect promoter is a functional promoter.

ab 28. (New) The shuttle vector of claim 8, wherein the insect promoter comprises a sequence at least 95% sequence identity to SEQ ID NO: 1 from bp 351 to bp 527, and wherein the insect promoter is a functional promoter.

29. (New) The shuttle vector of claim 9, wherein the insect promoter comprises a sequence at least 95% sequence identity to SEQ ID NO: 1, and wherein the insect promoter is a functional promoter.

#### REMARKS

The specification has been amended to properly reflect the priority claim to a related application.

Claims 1-26 are pending in the current application. By this amendment claims 18, 19, 20, 21, 22 and 24-26 are canceled. Claims 1-3, 7, 11-15, and 23 are amended to reflect amendments made in the parent application (No. 09/048,911), so that claims 1-7, 11-17, and 23 are believed to be identical to the claims as allowed in that application in the Advisory Action dated July 20, 2001. In addition, claims 8-10 have been amended to address the Examiner's comments in that Advisory Action. New claims 27-29 have been added; these claims correspond to claims 8-10 as they existed in the parent application. Support for the phrase "95% sequence identity" in claims 27-29 can be found at least at page 45, line 8 of the specification. Support for the functional language in claims 27-29 can be found at least at page 44, lines 24-26.

After entry of this amendment, claims 1-17, 23, and 27-29 are pending in the application.

No new matter is added by these amendments.

***Examiner Communication (Telephonic)***

Applicants thank Examiner Kaushal for taking the time to discuss this preliminary amendment and the Advisory action in the parent application with their undersigned representative on October 29, 2001. In particular, approaches for overcoming the 35 U.S.C. §112 rejection of claims 8-10 were discussed. It is believed that the amendment filed herewith reflects this discussion.

***Responses to the July 20, 2001, Advisory Action  
in Parent Application No. 09/048,911***

**Allowable subject matter**

In the parent application (No. 09/048,911), claims 1-7, 11-17 and 23 were deemed allowable by the Examiner in the Advisory Action. With this amendment, Applicants have replicated the language of these claims, and claims 1-7, 11-17, and 23 as submitted herewith are believed to likewise be allowable.

**35 U.S.C. § 112, first paragraph**

In the parent application (No. 09/048,911), claims 8-10 were rejected under 35 U.S.C. section 112, paragraph 1, as allegedly not being enabled by the specification. In particular, the Examiner alleged that there was insufficient support in the specification to enable a baculovirus promoter having 75% identity to the specified sequences.

Without admitting that the specification does not provide such support, and reserving the right to pursue broader claim scope in a later related application, Applicants have amended claims 8, 9, and 10 to remove the language related to sequence identity. Support for the language of these amendments can be found throughout the specification, and in the claims as originally filed. In light of these amendments, Applicant believes that claims 8-10 satisfy the requirements of 25 USC § 112.

In addition, in accordance with the undersigned's conversation with Examiner Kaushal on October 29, 2001, Applicant submits herewith new claims 27, 28, and 29. These claims are similar to claims 8, 9, and 10 as they existed in the parent case when the Advisory Action was issued. In accordance with Examiner Kaushal's suggestions, Applicant has included functional language in these claims, clearly indicating that the promoter is intended

to be functional. It is believed that these claims are both sufficiently described and enabled by the specification.

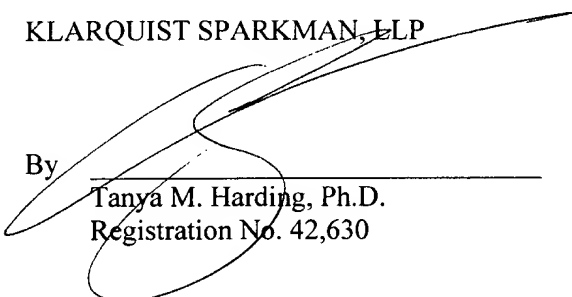
**Summary**

It is believed that all of the claims pending in this application after entry of this amendment are in condition for allowance. If any matters needs to be resolved prior to issuance of a Notice of Allowance, the Examiner is respectfully requested to telephone Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,

KLARQUIST SPARKMAN, LLP

By



Tanya M. Harding, Ph.D.  
Registration No. 42,630

One World Trade Center, Suite 1600  
121 S.W. Salmon Street  
Portland, Oregon 97204  
Telephone: (503) 226-7391  
Facsimile: (503) 228-9446

**Marked-up Version of Amended Claims  
Pursuant to 37 C.F.R. §§ 1.121(b)-(c)**

1. (Amended) A shuttle vector for transforming insect cells and prokaryotic cells, comprising:

- a) a prokaryotic origin of replication;
- ~~b) an insect promoter having homology to, and capable of functioning as, an immediate early baculovirus promoter;~~
- ~~c) a prokaryotic promoter sequence;~~
- ~~d) a selectable marker gene capable of conferring resistance to a bleomycin/phleomycin-type antibiotic under the transcriptional control of the insect promoter and the prokaryotic promoter sequence, in insect and prokaryotic cells respectively.~~
- b) a promoter region comprising an insect promoter and a prokaryotic promoter sequence; and
- c) a selectable marker coding sequence operably linked to the promoter region, so that the selectable marker is under the transcriptional control of the insect promoter in insect cells and the prokaryotic promoter sequence in prokaryotic cells, wherein the selectable marker is thereby capable of expression in both prokaryotic and insect cells to confer a selectable phenotype on cells transformed with the shuttle vector.

2. (Amended) The shuttle vector of claim 1, wherein the selectable marker is capable of conferring resistance to a bleomycin/phleomycin-type antibiotic~~prokaryotic promoter sequence is a cryptic promoter within the insect promoter.~~

3. (Amended) The shuttle vector of claim ~~1~~ 2, wherein the bleomycin/phleomycin-type antibiotic is Zeocin.

7. (Amended) The shuttle vector of claim 1, wherein the insect promoter is an immediate early baculovirus promoter~~comprises an IE2B element substantially homologous to SEQ ID NO: 10.~~

8. (Amended) The shuttle vector of claim 7, wherein the insect promoter comprises an IE2B element having a sequence ACAGGACGC (SEQ ID NO: 10)~~a GATA-IE2B element pair substantially homologous to SEQ ID NO: 9 and SEQ ID NO: 10.~~

9. (Amended) The shuttle vector of claim 8, wherein the insect promoter comprises a sequence as shown in SEQ ID NO: 1 from bp 351 to bp 527~~substantially homologous to SEQ ID NO: 1 from bp 351 to bp 527.~~

10. (Amended) The shuttle vector of claim 9, wherein the insect promoter comprises a sequence as shown in~~substantially homologous to~~ SEQ ID NO: 1.

11. (Amended) The shuttle vector of claim 1 further comprising DNA transposable elements~~defining a transposon.~~

12. (Amended) The shuttle vector of claim 11, wherein the selectable marker coding sequence is between the transposable elements~~gene is within the transposon.~~

13. (Amended) The shuttle vector of claim 12, further comprising an insertion site for heterologous DNA between the transposable elements~~within the transposon.~~

15. (Amended) The shuttle vector of claim 11, further comprising an inducible transposase gene between the transposable elements~~within the transposon.~~

23. (Amended) Recombinant insect cells transformed with the shuttle vector of claim 1, expressing a heterologous ~~protein selected from the group consisting of insect ion transport peptide hormones and biologically active derivatives thereof.~~